

CLAIMS

1. (Previously presented) A spring member for disc-brake calipers, suitable for being mounted in a disc-brake caliper, the caliper being suitable for being arranged, in a fitted configuration, astride a brake disc rotatable about an axis defining an axial direction, said caliper comprising a space for housing at least one pad which extends predominantly in a tangential direction parallel to a braking band of the brake disc and perpendicular to the axial direction, the spring member being interposed between a lateral edge of a pad and reaction surfaces of the caliper so as to act resiliently on the pad, the spring member comprising a 'U'-shaped portion suitable for forming a connection with a protuberance of the reaction surfaces which projects in the tangential direction into the housing space, a first resilient portion which extends substantially in a radial direction perpendicular to the axial and tangential directions, is suitable for acting on the pad in a tangential direction, and is operatively connected to the 'U'-shaped portion, and a second resilient portion which extends substantially in the tangential direction, is operatively connected to the first resilient portion, and is suitable for acting on the pad in a radial direction, wherein the first resilient portion is inclined in a manner such that a first connection end of the first resilient portion, connected to the 'U'-shaped portion, is in contact with reaction shoulders and a second connection end, connected to the second resilient portion, is arranged, in the tangential direction, further towards the interior of the housing space than the first connection end, the first and second resilient portions being a single body projecting from the first connection end of the first resilient portion so that, when the spring member and the respective pad are in a fitted configuration in the housing space of the caliper, the pad is acted on resiliently by the spring member both in a radial direction and in a tangential direction, whether or not a braking force is being applied;

wherein the spring member comprises two limbs and a connecting arm between the limbs so that, when the spring member is in a fitted configuration on the caliper, each limb can act resiliently on a respective pad, the pads being arranged opposite one another in the axial direction; said limbs comprise, in the region of a portion attached to the connecting arm, a notch which can separate the connecting arm from the first section of the 'U'-shaped

portion so as to permit resilient relative bending between the connecting arm and the first section of each limb.

2. (Previously presented) A spring member according to Claim 1 in which the first resilient portion is substantially straight.

3. (Cancelled).

4. (Previously presented) A spring member according to Claim 1 in which the spring member can be mounted astride the brake disc on reaction surfaces of the caliper and can cooperate resiliently with lateral edges of a pair of pads arranged on opposite sides of the brake disc.

5. (Previously presented) A spring member according to Claim 1 in which the 'U'-shaped portion has a substantially trapezoidal shape and can form a snap-coupling with the protuberance of the reaction surfaces.

6. (Cancelled).

7. (Previously presented) A spring member according to Claim 1 in which the connecting arm comprises two fingers disposed at axially opposite ends and suitable for being inserted in corresponding recesses of the caliper so as to permit the location and/or clamping of the spring member in the axial direction.

8. (Previously presented) A spring member according to Claim 1 in which the connecting arm comprises a thrust portion which can come into abutment with a surface of a respective arch which faces towards a seat for the compatible brake disc.

9. (Previously presented) A spring member according to Claim 1 in which the spring member comprises lead-in tabs which are arranged substantially axially and are suitable for constituting a lead-in for the axial insertion of the pads in the respective housing spaces.

10. (Previously presented) A disc-brake caliper comprising reaction surfaces suitable for cooperating with a spring member according to Claim 1.

11. (Previously presented) A disc-brake caliper comprising at least one spring member according to Claim 1.

12. (Previously presented) A disc brake comprising at least one spring member according to Claim 1.

13. (Currently Amended) A spring member structured for attachment with a disc-brake yoke having first and second reaction surfaces, said spring member designed to limit vibrations of a first and second disc-brake caliper pad having lateral edges, said spring member cooperating with the lateral edges of the pads and the reaction surfaces of the disc-brake yoke, said spring member comprising: a connecting arm connecting a first and second limb;

a. said first limb comprising:

i. a U-shaped portion structured to interact with an upper, vertical, and lower surface of the first reaction surface; said U-shaped portion comprising a first substantially straight section for attachment to the upper surface, a second substantially straight section for attachment to the vertical surface, and a third substantially straight section for attachment to the lower surface; said first section and **third** section extending in a substantially parallel, coplanar direction, and said **second** section extending in a perpendicular direction thereby connecting the first and **third** section and thus forming the U-shaped portion;

- ii. a first resilient portion attached to the third section, said first resilient portion restricting movement of the pad in a first direction;
 - iii. a second resilient portion attached to the first resilient portion; said second resilient portion restricting movement of the pad in a second direction;
 - b. said second limb comprising:
 - i. a U-shaped portion structured to interact with an upper, vertical, and lower surface of the second reaction surface; said U-shaped portion comprising a first substantially straight section for attachment to the upper surface, a second substantially straight section for attachment to the vertical surface, and third substantially straight section for attachment to the lower surface; said first section and second section extending in a substantially parallel, coplanar direction, and said third section extending in a perpendicular direction thereby connecting the first and second section and thus forming the U-shaped portion;
 - ii. a first resilient portion attached to the second section, said first resilient portion restricting movement of the pad in a first direction;
 - iii. a second resilient portion attached to the first resilient portion; said second resilient portion restricting movement of the pad in a second direction;
 - c. said connecting arm connecting the third section of the first limb to the third section of the second limb, said connecting arm being separated from the first section of the first limb by a first recess, said connecting arm being separated from the first section of the second limb by a second recess; said connecting arm comprising a first and second finger for attachment to the yoke for limiting movement of the spring member; said first and second recesses permitting resilient bending between the connecting arm and the first section of each limb.
14. (Previously presented) The first limb of Claim 13 comprising a first, second, and third lead-tab for facilitating axial insertion of the pads into the yoke; the lead-tabs integrally attached to the third section, first resilient portion, and second resilient portion.

15. (Previously presented) A spring member structured for attachment with a disc-brake yoke having first and second reaction surfaces, said spring member designed to limit vibrations of a first and second disc-brake caliper pad having lateral edges, said spring member cooperating with the lateral edges of the pads and the reaction surfaces of the disc-brake yoke, said spring member comprising: a connecting arm connecting a first and second limb;
- a. said first limb comprising:
 - i. a U-shaped portion structured to interact with an upper, vertical, and lower surface of the first reaction surface; said U-shaped portion comprising a first substantially straight section for attachment to the upper surface, a second substantially straight section for attachment to the vertical surface, and third substantially straight section for attachment to the lower surface;
 - ii. a first resilient portion attached to the U-shaped portion, said first resilient portion restricting movement of the pad in a first direction;
 - iii. a second resilient portion attached to the first resilient portion; said second resilient portion restricting movement of the pad in a second direction;
 - b. said second limb comprising:
 - i. a U-shaped portion structured to interact with an upper, vertical, and lower surface of the second reaction surface; said U-shaped portion comprising a first substantially straight section for attachment to the upper surface, a second substantially straight section for attachment to the vertical surface, and third substantially straight section for attachment to the lower surface;
 - ii. a first resilient portion attached to the U-shaped portion, said first resilient portion restricting movement of the pad in a first direction;
 - iii. a second resilient portion attached to the first resilient portion; said second resilient portion restricting movement of the pad in a second direction;
 - c. said connecting arm connecting the third section of the first limb to the third section of the second limb, said connecting arm being separated from the first

section of the first limb by a first recess, said connecting arm being separated from the second section of the second limb by a second recess; said connecting arm comprising a first and second finger for attachment to the yoke for limiting movement of the spring member; said first and second recesses permitting resilient bending between the connecting arm and the first section of each limb.

16. (Previously presented) The first limb of Claim 15 comprising a first, second, and third lead-tab for facilitating axial insertion of the pads into the yoke; the lead-tabs integrally attached to the third section, first resilient portion, and second resilient portion.